Telotristat Etiprate Appears to Halt Carcinoid Heart Disease
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Background and Objectives
Carcinoid Heart Disease (CHD) is a serious complication of the Carcinoid Syndrome (it occurs in as many as 50% of patients during the course of their disease). 46%-70% of cases operated with bioprosthetic valves develop recurrent carcinoid valvulopathy on the newly implanted tissue valves1,2. Until now, only mechanical prosthetic valves avoid recurrent fibrosis. Aim(s): To demonstrate the effects of telotristat etiprate, a tryptophan hydroxylase inhibitor, on serotonin levels and the course of CHD.

Methods
2 patients with CHD were among those entered in the TELESTAR phase III trial. One demonstrated carcinoid valve disease on the native tricuspid and pulmonic valves, suggesting the likelihood that valve surgery might be imminent; the other demonstrated recurrent carcinoid valve disease on the tricuspid and pulmonic bioprosthetic (tissue) replaced valves. We studied telotristat etiprate’s effect upon biomarkers and valve disease progression as seen on serial echo studies.

Results
Both patients demonstrated no significant progression of valvulopathy on serial echocardiographic studies since enrollment in the TELESTAR trial and continued treatment with telotristat etiprate.

Conclusions
Carcinoid Heart Disease is a frequent complication of the Carcinoid Syndrome. Telotristat etiprate reduces serotonin to levels which appear subthreshold to that which stimulates fibrosis associated with CHD3. This drug might prevent the need for valve surgery in many cases, and enable the use of bioprosthetic valves in others, without recurrent fibrosis.

3 A review of % reduction of u5HIAA or serotonin in 5 CHD patients from TELESTAR and TELECAST revealed a 47-90% reduction of these markers from their pre-telotristat levels.